LLL	111111111	88888888888	RRRRRRRRRRR	***************************************	LLL
iii	111111111	88888888888	RRRRRRRRRRR	**********	LLL
iii	111111111	88888888888	RRRRRRRRRRR	******	
ill	********			111111111111111111111111111111111111111	LLL
LLL	***		RRR RRR	III	LLL
LLL	111	888 888	RRR RRR	III	LLL
LLL	111	888 888	RRR RRR	TTT	LLL
LLL	111	888 888	RRR RRR	TTT	LLL
LLL	III	888 888	RRR RRR	TTT	LLL
LLL	111	888 888	RRR RRR	ŤŤŤ	III
LLL	111	8888888888	RRRRRRRRRRR	ŤŤŤ	iii
iii	îii	88888888888	RRRRRRRRRRR	ŤŤŤ	ili
iii	111	88888888888	RRRRRRRRRRR	TTT	
	111			111	LLL
LLL	111		RRR RRR	III	LLL
LLL	111	888 888	RRR RRR	111	LLL
LLL	111	BBB BBB	RRR RRR	TTT	LLL
LLL	111	888 888	RRR RRR	TTT	LLL
LLL	III	BBB BBB	RRR RRR	TTT	LLL
LLL	111	BBB BBB	RRR RRR	ŤŤŤ	III
IIIIIIIIIIIIII	111111111	88888888888	RRR RRR	ŤŤŤ	III III III III III
LLLLLLLLLLLLLLL	11111111	888888888888	RRR RRR	iii	LLLLLLLLLLLLLLLLL
	111111111	B8888888888	RRR RRR		
LLLLLLLLLLLLLLL	111111111		HHH HHH	TTT	LLLLLLLLLLLLLLL

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	BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	VV	22222222 22 22 22 22 22 22 22 22 22 22	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	000000 000000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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RR RR LIBSVECTOR Table of contents

- Entry vectors for LIBRTL.EXE 3 1 15-SEP-1984 23:44:46 VAX/VMS Macro V04-00

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DECLARATIONS LIBRIL Vector

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1-0

.TITLE LIBSVECTOR - Entry vectors for LIBRTL.EXE /1-011/ ; File: LIBVECTOR.MAR Edit:LEB1011

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FACILITY: Run-Time Library - General Utility Procedures ABSTRACT:

This module contains the entry vector definitions for the VAX-11 Run-Time Library shareable image LIBRTL.EXE

ENVIRONMENT: User mode, AST Reentrant

AUTHOR: Steven B. Lionel, CREATION DATE: 28-October-1982

MODIFIED BY:

44555555555

1-001 - Original. SBL 28-October-1982
1-002 - Make FOR\$CNV_OUT_x entries separate - they were improperly declared as aliases of OTS\$CVT_L_Tx routines. SBL 29-Nov-1982
1-003 - Add LIB\$GETxxI routines. SBL 19-Jan-1983
1-004 - Add OTS\$\$RET_A_CVT_TAB_R1, OTS\$\$CVT_MUL and LIB\$SIG_TO_STOP.
FM 20-MAY-1983.

FM 20-MAY-1983.

1-005 - Add remaining LIB\$, OTS\$ and STR\$ routines that were previously non-shared. LEB 23-May-1983.

1-006 - Cleanup. LEB 24-May-1983.

1-007 - Add OTS\$CVT L TU, OTS\$CVT TU L. SBL 26-May-1983

1-008 - Add STR\$MATCH WILD and LIB\$DAY OF WEEK. LEB 9-Jan-1984

1-009 - Add LIB\$FIND TMAGE_SYMBOL, LIB\$FIND_FILE_END and LIB\$FILE_SCAN_END. LEB 25-Feb-1984

1-010 - Add OTS\$DIV_PKSHORT and OTS\$DIV_PK_LONG. DG 5-Mar-1984

1-011 - Add LIB\$CREXTE_DIR. LEB 11-Apr-1984

LIBSVECTOR

- Entry vectors for LIBRTL.EXE L 1

15-SEP-1984 23:44:46 VAX/VMS Macro V04-00 Page (1)

0000 58 ;--

L

```
.SBTTL DECLARATIONS
LIBRARY MACRO CALLS:
             LIB$:LIBRTL.MLB required
      EXTERNAL DECLARATIONS:
             .DSABL GBL
                                       ; force all external symbols to be declared
      MACROS:
    Macro to define an entry vector for a CALL entry point
                               NAME
NAME
                     VCALL
             .ALIGN
                    QUAD
                               NAME
NAME+2
             . TRANSFER
              . MASK
             JMP
             .ENDM
    Macro to define an entry vector for a JSB entry point
             .MACRO
                     VJSB
                               NAME
             .EXTRN
             ALIGN QUAD
             . TRANSFER
                               NAME
                               NAME
2
             .BLKB
   : Macro to define a table that is included in the vector. The macros invoked by VTAB are in LIB$:LIBRTL.MLB.
             .MACRO VTAB
                               NAME
              TRANSFER
                               NAME
             S'NAME
    NAME::
             .ENDM
   Macro to define an alias for the next vectored entry point
             .MACRO ALIAS .TRANSFER
                               NAME
NAME
             . ENDM
```

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LI

6 VAX/VMS Macro V04-00 3 ELIBRTL.SRCJLIBVECTOR.MAR; 1

.SBTTL LIBRTL Vector

B 2

Define vectored entry points for the General Utility Procedures by module in alphabetical order.

Any additions to this file should be reflected in COMS:LIBRTLVEC.DAT. All new entry points must be appended to the end of the list. NEVER change existing entries unless you are sure that what you do won't break existing programs.

; Module LIB\$AB_ASC_EBC

VTAB LIBSAB_ASC_EBC

: Module LIB\$AB_EBC_ASC

VTAB LIBSAB_EBC_ASC

; Module LIB\$AB_UPCASE

VTAB LIBSAB_UPCASE

Module LIBSANALYZE_SDESC

VCALL LIBSANALYZE_SDESC_R2

; Module LIB\$AST_IN_PROG

VCALL LIBSAST_IN_PROG

: Module LIBSATTACH

VCALL LIBSATTACH

: Module LIB\$CLI_CALLBACK

VCALL LIBSDELETE_LOGICAL
VCALL LIBSDELETE_SYMBOL
VCALL LIBSDISABLE_CTRL
VCALL LIBSENABLE CTRL
VCALL LIBSGET_SYMBOL
VCALL LIBSSET_LOGICAL
VCALL LIBSSET_SYMBOL

Module LIBSCRC

VCALL LIBSCRC

: Module LIBSCRC_TABLE

VCALL LIBSCRC_TABLE

: Module LIB\$CURRENCY

VCALL LIBSFFS

LIBSFILE SCAN LIBSFIND FILE

: Module LIBSFILESCAN

VCALL

Module LIB\$FIXUP_FLT

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LIBSVECTOR

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```
VCALL LIBSPUT_OUTPUT
              ; Module LIBSRADIX_POINT
                       VCALL LIBSRADIX_POINT
              ; Module LIBSRENAME_FILE
0488
0490
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0490
0498
0498
0498
04A0
04A0
                       VCALL LIBSRENAME_FILE
              ; Module LIBSREVERT
                       VCALL LIBSREVERT
              : Module LIBSSCANC
                       VCALL LIBSSCANC
              ; Module LIB$SCOPY
                                 LIB$SCOPY_DXDX
LIB$SCOPY_R_DX
LIB$SCOPY_R_DX
LIB$SCOPY_R_DX6
LIB$SFREET_DD
                        VCALL
                        VJSB
VCALL
                        VJSB
                        VCALL
                                  LIBSSFREET DD6
                        VJSB
                        VCALL
                                  LIB$SFREEN_DD
                                 LIBSSFREEN DD6
LIBSSGET1 DD
                        VJSB
                        VCALL
                                 LIBSSGETT DD_R6
                        VJSB
             : Module LIB$SIGNAL
                                 LIB$SIGNAL
LIB$STOP
                        VCALL
                       VCALL
              ; Module LIB$SIG_TO_RET
                       VCALL LIBSSIG_TO_RET
              : Module LIB$SKPC
                       VCALL LIBSSKPC
                Module LIB$SPANC
                       VCALL LIBSSPANC
                Module LIBSSPAWN
                       VCALL LIBSSPAUN
                Module LIB$STAT_VM
                       VCALL
                                 LIBSSHOW_VM
LIBSSTAT_VM
```

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```
; Module LIBSTPARSE
           VCALL LIBSTPARSE
; Module LIBSTRA_ASC_EBC
           VCALL LIBSTRA_ASC_EBC
 Module LIBSTRA_EBC_ASC
          VCALL LIBSTRA_EBC_ASC
 Module LIBSVM
                     LIBSFREE VM
LIBSGET_VM
           VCALL
           VCALL
: Module LIB$WAIT
          VCALL LIBSWAIT
  Module OTS$$CVTDT
          ALSB
                     OTS$$CVT_D_T_R8
OTS$$CVT_F_T_R8
: Module DTS$$CVTRT
          VUSB
                     OTS$$CVT_G_T_R8
OTS$$CVT_H_T_R8
; Module OTS$CVTLT
          VCALL OTS$CVT_L_TB
VCALL OTS$CVT_L_TI
VCALL OTS$CVT_L_TL
VCALL OTS$CVT_L_TO
VCALL OTS$CVT_L_TO
VCALL OTS$CVT_L_TZ
; See below for FOR$CNV_OUT_x alternate entries
: Module OTS$CVTTF
          VCALL OTSSCVT_T_F
; Module OTS$CVTTIL
          ALIAS FORSCNV_IN_I
VCALL OTSSCVT_TI_L
; Module OTS$CVTTLL
                     FORSCNV IN L
OTSSCVT TL_L
           VCALL
```

Module OTS\$CVTTOL

10 (3)

```
LIBSVECTOR
```

```
- Entry vectors for LIBRTL.EXE LIBRTL Vector
                                                                                                                                                                                                                  15-SEP-1984 23:44:46 VAX/VMS Macro V04-00 6-SEP-1984 11:12:03 [LIBRIL.SRC]LIBVECTOR.MAR;1
                                                                                                                                                                 OTS$CVT_TB_L
FOR$CNV_IN_O
OTS$CVT_TO_L
FOR$CNV_IN_Z
OTS$CVT_TZ_L
                                                                                                                           VCALL
ALIAS
VCALL
ALIAS
VCALL
                                                                                          Module OTS$CVTTR
                                                                                                                          ALIAS
VCALL
VCALL
VCALL
                                                                                                                                                                  FORSCNY_IN_DEFG
OTSSCVT_T_G
OTSSCVT_T_H
                                                                                           Module DTS$MOVE
                                                                                                                                                                   OTS$MOVE3_R5
OTS$MOVE5
                                                                                                                           VCALL
                                                                                                                           VJSB
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06
                                                            VCALL
                                                                                                                                                                   OTS$MOVE5_R5
                                                                                                                           VJSB
                                                                                           Module OTS$SCOPY
                                                                                                                                                                  OTS$SCOPY_DXDX
OTS$SCOPY_DXDX6
OTS$SCOPY_R_DX
OTS$SCOPY_R_DX6
OTS$SFREET_DD
OTS$SFREET_DD
OTS$SFREEN_DD
OTS$SFREEN_DD
OTS$SFREEN_DD6
OTS$SFREEN_DD6
OTS$SFREEN_DD6
                                                                                                                           VCALL
                                                                                                                           VJSB
                                                                                                                           VCALL
                                                                                                                           VJSB
                                                                                                                           VCALL
                                                                                                                           VJSB
                                                                                                                           VCALL
                                                                                                                           VJSB
                                                                                                                           VCALL
                                                                                                                           VJSB
                                                                                                                                                                   OTSSSGET1_DD_R6
                                                                                  : Module STRSANALYZE_SDESC
                                                                                                                                                                   STRSANALYZE_SDESC_R1
                                                                                                                           VCALL
                                                                                                                           VJSB
                                                                                         Module STR$APPEND
                                                                                                                          VCALL STRSAPPEND
                                                                                         Module STR$COMPARE
                                                                                                                          VCALL STRSCOMPARE
                                                                                         Module STR$COMPARE_CASE_BLIND
                                                                                                                           VCALL STR$CASE_BLIND_COMPARE
                                                                                  ; Module STR$COMPARE_EQL
                                                                                                                                                                  STR$COMPARE_EQL
                                                                                                                           VCALL
                                                                                         Module STRSCONCAT
                                                                                                                                                                   STR$CONCAT
                                                                                                                           VCALL
```

```
Module STR$COPY
                                 STR$COPY_DX_R8
STR$COPY_R
STR$COPY_R_R8
                       VCALL
                       VCALL
                Module STR$DUPL_CHAR
                                 STR$DUPL_CHAR
STR$DUPL_CHARR8
                       VJSB
06C0
06C8
06C8
06C8
06D8
06D8
06E0
06E0
06E0
06F8
0700
        Module STR$FIND_FIRST
                       VCALL
                                 STRSFIND_FIRST_IN_SET
STRSFIND_FIRST_NOT_IN_SET
                Module STR$FIND_FIRST_SUBSTRING
                       VCALL STRSFIND_FIRST_SUBSTRING
                Module STR$GET_FREE
                                 STRSFREE1_DX_R4
STRSGET1_DX_R4
                       VCALL
                       VCALL
                       VJSB
                                 STRSGET1_DX_R4
                Module STR$LEFT
                       VCALL
                                 STR$LEFT_R8
               Module STR$LEN_EXTR
                       VCALL
                                 STR$LEN_EXTR_R8
                Module STR$POSITION
                       VCALL
                                 STR$POSITION
                                 STR$POSITION_R6
                Module STR$POS_EXTR
                       VCALL
                                 STR$POS_EXTR_R8
               Module STR$PREFIX
                       VCALL
                                 STRSPREFIX
                Module STRSREPLACE
                       VCALL
                                 STR$REPLACE
```

VJSB

STRSREPLACE_R8

Module LIBSADDX

15-SEP-1984 23:44:46 VAX/VMS Macro V04-00 Page 6-SEP-1984 11:12:03 [LIBRTL.SRC]LIBVECTOR.MAR;1

```
Module STRSRIGHT
                   STRSRIGHT
STRSRIGHT_R8
         VCALL
  Module STR$TRANSLATE
         VCALL STR$TRANSLATE
  Module STRSTRIM
         VCALL STRSTRIM
: Module STR$UPCASE
         VCALL
                   STR$UPCASE
End of initial LII after this point.
  End of initial LIBRTL vector. All subsequent additions must be made
: Module OTS$CVTLT (continued)
                   FOR$CNV_OUT_I
FOR$CNV_OUT_O
FOR$CNV_OUT_Z
                                       ; Use OTS$CVT_L_TI instead
; Use OTS$CVT_L_TL instead
; Use OTS$CVT_L_TO instead
; Use OTS$CVT_L_TZ instead
         VCALL
          VCALL
          VCALL
         VCALL
: Module LIB$GETDVI
         VCALL
                  LIBSGETDVI
: Module LIBSGETJPI
         VCALL LIBSGETJPI
: Module LIB$GETSYI
                 LIB$GETSYI
         VCALL
: Module LIB$SIGSTOP
         VCALL LIB$SIG_TO_STOP
: Module OTS$$CVTRT
         V12B
                   OTS$$RET_A_CVT_TAB_R1
OTS$$CVT_MOL
  Add all the remaining LIBS, STRS and OTSS modules that were previously
  non-shared.
```

```
VCALL
               LIB$ADDX
LIB$SUBX
Module LIBSASN_WTH_MBX
       VCALL LIBSASN_WTH_MBX
Module LIB$BBCCI
       VCALL LIBSBBCCI
Module LIB$BBSSI
      VCALL LIB$BBSSI
Module LIBSBINARY_TREE
               LIBSINSERT_TREE
LIBSLOOKUP_TREE
LIBSTRAVERSE_TREE
       VCALL
       VCALL
       VCALL
Module LIBSCALLG
      VCALL LIBSCALLG
Module LIBSCHAR
      VCALL LIBSCHAR
Module LIB$COMMON
      VCALL
               LIBSGET_COMMON
LIBSPUT_COMMON
Module LIB$DATE_TIME
      VCALL LIBSDATE_TIME
Module LIBSDAY
      VCALL LIBSDAY
Module LIB$DO_COMMAND
      VCALL LIBSDO_COMMAND
Module LIBSEDIV
      VCALL LIBSEDIV
Module LIBSEMODD
       VCALL LIBSEMODD
```

Module LIBSEMODF

VCALL

LIBSEMODF

```
: Module LIBSEMODG
      VCALL LIBSEMODG
; Module LIBSEMODH
  VCALL LIBSEMODH
: Module LIBSEMUL
      VCALL LIBSEMUL
: Module LIBSGET_FOREIGN
 VCALL LIBSGET_FOREIGN
: Module LIBSICHAR
      VCALL LIBSICHAR
 Module LIBSINSQHI
 VCALL LIBSINSQHI
: Module LIB$INSQTI
      VCALL LIBSINSQTI
: Module LIBSLEN
      VCALL LIBSLEN
; Module LIB$LOOKUP_KEY
  VCALL LIB$LOOKUP_KEY
; Module LIB$MOVC3
      VCALL LIBSMOVC3
 Module LIB$MOVC5
  VCALL LIBSMOVC5
 Module LIB$POLYD
      VCALL LIBSPOLYD
 Module LIB$POLYF
  VCALL LIBSPOLYF
 Module LIB$POLYG
      VCALL LIBSPOLYG
```

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```
; Module LIB$POLYH
        VCALL
                LIB$POLYH
 Module LIBSREMQHI
        VCALL LIBSREMQHI
 Module LIBSREMQTI
        VCALL LIBSREMQTI
  Module LIBSRUN_PROGRAM
        VCALL LIBSRUN_PROGRAM
  Module LIB$SYS_ASCTIM
        VCALL LIB$SYS_ASCTIM
 Module LIB$SYS_FAO
        VCALL LIBSSYS_FAO
 Module LIB$SYS_FAOL
        VCALL LIB$SYS_FAOL
; Module LIB$SYS_GETMSG
        VCALL LIBSSYS_GETMSG
: Module LIB$SYS_TRNLOG
        VCALL LIB$SYS_TRNLOG
: Module LIBSTIMER
                LIBSFREE_TIMER
LIBSINIT TIMER
LIBSSHOW_TIMER
        VCALL
        VCALL
        VCALL
                LIBSSTAT_TIMER
 Module LIBSTRIM_FILESPEC
        VCALL LIBSTRIM_FILESPEC
  Module OTS$CNVOUT
                 COB$CNVOUT
        VCALL
                OTS$CNVOUT
        VCALL
                OTS$CNVOUT_G
        VCALL
                OTS$CNVOUT_H
  Module OTS$CVTDP_R9
        ALIAS
                COBSCVTDP_R9
```

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STRSRECIP

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VAX/VMS Macro VO4-00 [LIBRTL.SRC]LIBVECTOR.MAR;1

; Module LIB\$FILESCAN

VCALL LIBSFIND_FILE_END LIBSFILE_SCAN_END

; Module LIB\$FIND_IMAGE

VCALL LIBSFIND_IMAGE_SYMBOL

Module OTS\$DIV_PKSHORT

VCALL OTS\$DIV_PKSHORT

Module OTS\$DIV_PK_LONG

VCALL OTS\$DIV_PK_LONG

; Module LIBSCREATE_DIR

VCALL LIBSCREATE_DIR

.END

; End of module LIB\$VECTOR

2-

IB\$VECTOR ymbol table	- Entry vectors	for	LIBRTL.EXE B 3 15-SEP-19 6-SEP-19	84 23:44:46 VAX/VMS Macro	V04-00 Page IBVECTOR.MAR; 1	18
OR\$CNV_OUT_1	****** X	01	LIB\$FREE_VM	****** X 01		
ORSCNV_OUT_L ORSCNV_OUT_C ORSCNV_OUT_Z IBSAB_ASC_EBC IBSAB_EBC_ASC IBSAB_UPCASE IBSAD_X	****** X		LIB\$GETDVI	****** X 01		
PRICHY OUT 7	******* X	01	LIB\$GETJPI LIB\$GETSYI	****** X 01		
BSAB ASC EBC	00000000 RG	Ŏi	LIBSGET_COMMAND	******		
B\$AB_EBC_ASC	00000100 RG	01	I IBECET COMMON	******* X 01		
B\$AB_UPCASE	00000200 RG	01	LIBSGET_EF LIBSGET_FOREIGN LIBSGET_INPUT LIBSGET_LUN LIBSGET_OPCODE LIBSGET_SYMBOL	****** X 01		
BSANALYZE_SDESC	******* X	01	LIBSGET_FOREIGN	****** X 01		
BSANALYZE SDESC R2	*******	Ŏi	LIBSGET LUN	******* X 01 ****** X 01 ****** X 01 ****** X 01 ****** X 01		
BSANALYZE SDESC_R2 BSASN_WTH MBX	****** X	01	LIB\$GET_OPCODE	****** X 01		
BSAST_IN_PROG	****** X	01 01 01 01	LIB\$GET_SYMBOL	****** X 01		
B\$ATTĀCH B\$BBCCI	******* X	01	LIBSGET_VM LIBSICHAR	****** X 01		
IB\$BBSSI	****** X	01	LIBSINDEX	******		
IB\$CALLG	****** X	01	LIBSINIT TIMER	****** X 01		
B\$CHAR	****** X	01	LIBSINSERT_TREE	****** X 01		
BSCRC_TABLE	******* X	01	LIB\$INSQHI LIB\$INSQTI	****** X 01		
B\$CREATE_DIR	*******	01 01 01	LIBSINSV	****** X 01		
B\$CURRENCY	****** X	01	LIB\$INT_OVER	****** X 01		
BSCVTDF	****** X	01	LIB\$LEN	****** X 01 ****** X 01 ****** X 01 ****** X 01		
B\$CVT_DTB B\$CVT_HTB	******* X	01	LIB\$LOCC	****** X 01		
B\$CVT_OTB	****** X	01	LIB\$LOOKUP_KEY LIB\$LOOKUP_TREE	****** X 01		
B\$DATE_TIME	****** X	01 01 01	LIB\$LP_LINES	****** X 01		
BSDAY	****** X	01	LIBSMATCHC	******* X 01		
BADAY OF MEEK	****** X	01	LIBSMATCH_COND			
BSDELETE FILE	*******	01	LIB\$MOVC3	****** X 01		
B\$DAY_OF_WEEK B\$DEC_OVER B\$DELETE_FILE B\$DELETE_LOGICAL	****** X	01	LIBSMOVTC	****** X 01		
RADELE LE ZAMBOT	****** X	01 01 01	LIB\$MOVTUC	****** X 01		
B\$DIGIT_SEP B\$DISABCE_CTRL	******* X	01	LIB\$POLYD	****** X 01		
B\$DO_COMMAND	******	Ŏi	LIB\$POLYF LIB\$POLYG	****** X 01		
BSEDIV	****** X		LIB\$POLYH	****** X 01		
BSEMODD	****** X	01 01 01 01	LIB\$PUT_COMMON	****** X 01		
B\$EMODF B\$EMODG	******* X	01	LIB\$PUT_OUTPUT	****** X 01		
B\$EMODH	******* Ŷ	01	LIBSRADIX POINT LIBSREMONI	****** X 01		
B\$EMUL	****** X	01	LIBSREMQTI	****** X 01		
B\$ENABLE_CTRL	****** X	01	LIBSRENAME FILE LIBSRESERVE_EF	****** X 01		
BSESTABLTSH BSEXTV	******* X	01 01 01 01	LIB\$RESERVE_EF	****** X 01		
BSEXTZV	*******	01	LIBSREVERT LIBSRUN_PROGRAM	****** X 01		
BSFFC	****** X	Ŏi	LIBSSCANC	****** X 01		
BSFFS	****** X		LIB\$SCOPY_DXDX	****** X 01		
B\$FILE_SCAN	****** X	01	LIB\$SCOPY_DXDX6	****** X 01		
BSFILE_SCAN_END	******* X	01	LIBSSCOPY R DX LIBSSCOPY R DX6	******* X 01		
B\$FIND_FILE_END	****** X	01 01 01 01	LIB\$SET_LOGICAL LIB\$SET_SYMBOL LIB\$SFREE1_DD LIB\$SFREE1_DD6 LIB\$SFREEN_DD LIB\$SFREEN_DD6	****** X 01		
BSF IND IMAGE SYMBOL	****** X	01	LIB\$SET_SYMBOL	****** X 01		
BEST T UNDER	****** X	01	LIBSSFREET DD	****** X 01		
BSFREE EF	******* X	01	LIBSSERFENDD	****** X 01		
IBSFIND_FILE_END IBSFIND_FILE_END IBSFIND_IMAGE_SYMBOL IBSFIXUP_FLT IBSFLT_UNDER IBSFREE_EF IBSFREE_LUN	****** X	01 01	LIB\$SFREEN_DD6	****** X 01		
IB\$FREE_TIMER	****** X	01	LIB\$SGET1_DD	****** X 01		

LIB\$VECTOR Symbol table	- Entry vectors	for	LIBRTL.EXE C 3 15-SEP-1984 6-SEP-1984	23:44:46	VAX/VMS ELIBRIL	Macro V04-00 .SRCJLIBVECTOR.MAR;1	Page	19
LIBSSGET1_DD_R6	****** X	01	OTSSCVT T D		****	x 01		
LIB\$SHOW_TIMER	****** X	01	OTS\$CVT_TE	0.00	****	X 01		
IB\$SHOW_VM	****** X	01	OTSSCVT_T_G		****	X 01		
IB\$SIGNĀL IB\$SIG_TO_RET	******* X	01 01 01	OTSSCVT T G OTSSCVT T H OTSSDIV PRSHORT		*****	X 01		
IRSSIG TO STOP	****** X	61	OTS\$DIV_PK_LONG		*****	X 01 X 01		
IB\$SIG_TO_STOP IB\$SKPC	******* X	01	OTS\$MOVE3		****	2 01		
IB\$SPANC	****** X	01	OTS\$MOVE3_R5		****	x ŏi		
IB\$SPAWN	****** X	01	DTS\$MOVES	***	****	X 01 X 01		
B\$STAT_TIMER	****** X	01	OTS\$MOVE5_R5 OTS\$SCOPY_DXDX OTS\$SCOPY_DXDX6 OTS\$SCOPY_R_DX	***	****	x 01		
IB\$STAT_VM	****** X	01	OTS\$SCOPY_DXDX		****	X 01		
IB\$STOP	******* X	01	DISSSCOPY_DXDX6		****	X 01		
IB\$SYS_ASCTIM	******	01	OTS\$SCOPY_R_DX6		*****	X 01		
IB\$SYS_FAO	****** X	ŏi	OTS\$SFREET_DD		*****	2 01		
B\$SYS_FAOL	******	01	OTS\$SFREE1_DD6		****	ŷ ŏi		
(B\$SYS GETMSG	****** X	01	OTS\$SFREEN_DD	***	****	x ŏi		
IB\$SYS_TRNLOG IB\$TPARSE	****** X	01	OTS\$SFREEN_DD6	***	****	X 01		
BSTPARSE	*****	01	OTS\$SGET1 DD	***	****	X 01		
IBSTRAVERSE TREE	****** X	01	OTS\$SGET1_DD_R6		****	X 01		
BSTRA_ASC_EBC BSTRA_EBC_ASC	****** X	01	SIRSADD		****	X 01		
BSTRIM_FICESPEC	****** X	01	STRSANALYZE_SDESC_R1		****	X 01		
B\$WAIT	******* Ŷ	01	STR\$APPEND		*****	X 01		
S\$\$CVT_D_T_R8	******* X	ŏi	STR\$CASE_BLIND_COMPARE		****	ŷ 01		
S\$\$CVT_F_T_RB	****** X	01	STR\$COMPARE		****	ŷ Ŏi		
IS\$\$CVT_G_T_R8	****** X	01	STR\$COMPARE_EQL		****	x ŏi		
TS\$\$CVT_H_T_R8 TS\$\$CVT_MUL	****** X	01	STRSCONCAT	***	****	X 01		
S\$\$CVT_MUL_	****** X	01	STR\$COPY_DX	***	****	x 01		
ISSSRET_A_CVT_TAB_R1	****** X	01	STR\$COPY_DX_R8		****	X 01		
SSCNVOUT	******	01	STR\$COPY_R		****	X 01		
TS\$CNVOUT_G TS\$CNVOUT_H	******* X	01	STR\$COPY R_R8		****	X 01		
SECUTOR BO	****** X	01	STRSDIVIDE		****	0 01		
SSCVTEP RO	****** X	01	STREDUTE CHAPPR		****	x 01		
S\$CVTDP_R9 S\$CVTFP_R9 S\$CVTGP_R9	****** X	Ŏi	STRSFIND FIRST IN SET		****	x ŏi		
SSCVTHP_R9	****** X	01	STRSFIND FIRST NOT IN SET		****	X 01 X 01		
S\$CVTPD_R9	****** X	01	STR\$FIND_FIRST_SUBSTRING	***	****	X 01		
ISSCVTPF R9	****** X	01	STR\$FREET_DX	***	****	X 01		
S\$CVTPG_R9	****** X	01	STR\$DUPL_CHAR STR\$DUPL_CHARR8 STR\$FIND_FIRST_IN_SET STR\$FIND_FIRST_NOT_IN_SET STR\$FIND_FIRST_SUBSTRING STR\$FREET_DX STR\$FREET_DX_R4		****	X 01		
SSCVTPH_R9	****** X	01	SINGUELL DA		****	X 01		
TS\$CVTRDP_R9	******* X	01	STRSGETT_DX_R4		****	X 01 X 01		
S\$CVTRGP_R9	*******	01	STR\$LEFT		****	x 01		
CECUTBUP DO	*******	Ŏi	STRSLEN FXTR		****	χ ŏi		
SSCVT_L_TB	******* X	Õi	STRSLEFT R8 STRSLEN_EXTR STRSLEN_EXTR R8 STRSMATCH_WIED		****	x ŏi		
S\$CVT_L_TI	****** X	01	STR\$MATCH_WIED	***	****	X 01 X 01		
SSCVT_L_TL	****** X	01	2 I Kamul		****	X 01		
SECAL TO	****** X	01	STR\$POSITION		****	X 01		
ISSCVT_L_TB ISSCVT_L_TI ISSCVT_L_TL ISSCVT_L_TO ISSCVT_L_TU	****** X	01	STR\$POSITION_R6		****	X 01		
TCSCUT TE	****** X	01	STR\$POS_EXTR		****	X 01		
TSECUT TI	******* X	01	STRSPOS EXTR_R8		****	X 01 X 01 X 01		
TSSCVT TI TI	****** Ŷ	ŏi	STRSRECIP		****	ŷ 01		
TS\$CVT_L_TZ TS\$CVT_TB_L TS\$CVT_TI_L TS\$CVT_TL_L TS\$CVT_TO_L TS\$CVT_TU_L	*******	ŏi	STRSREPLACE		****	x ŏi		
TS\$CVT_TU_L	****** X	Ŏi	STR\$REPLACE_R8		****	x 0i x 0i		
TSSEVT_TZ_L	****** X	01	STRSRIGHT	***	****	V 01		

```
15-SEP-1984 23:44:46 VAX/VMS Macro V04-00 6-SEP-1984 11:12:03 [LIBRIL.SRC]LIBVECTOR.MAR;1
 LIB$VECTOR
                                                    - Entry vectors for LIBRTL.EXE
 Symbol table
 STR$RIGHT_R8
                                                                              01
01
01
01
                                                      ******
STR$ROUND
                                                      *******
STR$TRANSLATE
                                                      *******
STRSTRIM
                                                      *******
STR$UPCASE
                                                      *******
                                                                              01
                                                                                Psect synopsis !
PSECT name
                                                                                    PSECT No.
                                                    Allocation
                                                                                                     Attributes
SLIBSVECTOR
                                                                                             0.)
                                                                                                      NOPIC
                                                    00000000
                                                                                                                                               LCL NOSHR NOEXE NORD
LCL SHR EXE RD
                                                                                                                                                                                  NOWRT NOVEC BYTE NOWRT NOVEC QUAD
                                                    00000A30
                                                                                                                  USR
                                                                                                                            CON
                                                                            Performance indicators
Phase
                                         Page faults
                                                                 CPU Time
                                                                                         Elapsed Time
                                                                00:00:00.08
00:00:00.35
00:00:04.74
00:00:00.20
00:00:01.62
00:00:00.11
                                                    36
154
209
                                                                                         00:00:00.88
Initialization
                                                                                         00:00:03.31
00:00:16.40
00:00:00.88
00:00:07.35
Command processing
Pass 1
Symbol table sort
                                                    149
27
Pass 2
Symbol table output
                                                                                         00:00:00.44
                                                                00:00:00.01
00:00:00.00
00:00:07.11
Psect synopsis output
                                                                                         00:00:00.01
Cross-reference output
                                                                                         00:00:00.00
Assembler run totals
                                                                                         00:00:29.30
The working set limit was 1350 pages.
40821 bytes (80 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 234 non-local and 0 local symbols.
857 source lines were read in Pass 1, producing 45 object records in Pass 2.
13 pages of virtual memory were used to define 7 macros.
                                                                        ! Macro library statistics !
Macro library name
                                                                         Macros defined
$255$DUA28:[LIBRTL.OBJ]LIBRTL.MLB;1
$255$DUA28:[SYSLIB]STARLET.MLB;2
                                                                                          Ď3
TOTALS (all libraries)
```

2-

87 GETS were required to define 3 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/LIS=LIS\$:LIBVECTOR/OBJ=OBJ\$:LIBVECTOR MSRC\$:LIBVECTOR/UPDATE=(ENH\$:LIBVECTOR)+LIB\$:LIBRTL/LIB

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